



A Case for Public-Private Partnership in TB Control

JOSEPH J. CAPUNO AND CARLOS ANTONIO R. TAN, JR.¹

Abstract

The case for public-private partnership in tuberculosis control is warranted since many patients still go to physicians in private practice despite the availability in public health facilities of free, cost-effective treatment protocol called the Directly Observed Treatment Short Course (DOTS). Despite the private sector's pioneering role in TB control in the country, it has been relegated to a mere social partner of the government in TB control. But since TB is proving to be a bigger public health menace than the public sector can handle, the private physicians are now involved as service delivery partners. Some policy directions are suggested to strengthen the emerging modes of public-private partnerships in TB control.

Keywords: tuberculosis control, public health, Directly Observed Treatment Short Course (DOTS).

Introduction

Following global trends in the provision and financing of social services, public-private partnerships (PPP) in public health programs have also been adopted in recent years. The various PPP modes already in practice include the privatization or management contracting of existing public hospitals (in Germany, South Africa, Malawi, Kenya), build-operate-transfer or lease-operate-transfer arrangements (in Australia, United Kingdom), and contracting for services in new areas (in Guatemala,

Cambodia, Haiti) [Harding 2003: 58-60]. According to an ADB study [2000], several local NGOs and village governments in India were involved successfully in a project to identify and disseminate best practices in health promotion and service delivery in poor areas. After the Asian financial crisis in 1997, the city of Yogyakarta in Indonesia contracted a private non-profit sector organization (Takaful Muhammadiyah) to extend insurance coverage to the poor. The study concludes that the various case studies show that PPPs in health can increase the access of the poor to health care, especially in the remote areas, and reduce as well the burden of care on the state. Also, according to WHO, public-private partnerships in TB control (called public-private mix DOTS) have been successfully piloted in recent years in Indonesia and India.

The need for stronger, concerted and sustained efforts from all sectors to control tuberculosis in the Philippines cannot be overstated. TB continues to be a major cause of deaths and illnesses and imposes a heavy economic burden to the country. According to WHO [2005], the country's TB incidence rate in 2003 is 296 per 100,000 population, up from an average incidence rate of 225.14 in 1992-96. In 2003, an estimated 49 out of every 100,000 Filipinos died of TB; up again from an average rate of 16.4 deaths in 1992-96. Among the high TB-burden countries in 2003, the Philippines with its incidence rate of 296, is ranked 9th overall, below Cambodia (508) and above China (102), Thailand (142) and Vietnam (178).

The burden of TB, both in terms of years of healthy life lost and economic costs, is heavy and borne unevenly across population groups. According to Peabody *et al.* [2005], TB causes the loss of over half a million years of healthy life due to illness and premature deaths every year. These losses are disproportionately borne by men and those of working age. In 1997 alone, aggregate forgone income due to illness or premature is about PhP7.9 billion, or about 9 percent of that year's total public and private health expenditures. It is also suggested that households with low

income and those in Southern Tagalog and National Capital Region have higher TB prevalence rates than others.

To combat the persistent threat of TB epidemic, the Department of Health under its National Tuberculosis Control Program (NTCP) has adopted since 1996, a TB treatment protocol called the Directly Observed Treatment Short Course (DOTS), which is proven to be cost-effective and endorsed by WHO. By 2003, the country achieved full DOTS coverage, which effectively means that each Filipino has access to a nearby public health center that administers DOTS services. The DOTS treatment success rate for 2002 cohort has reached 88 percent, thus meeting the global target. The DOTS case detection rate of 68 percent for 2003 was near the global target. Notwithstanding the considerable government achievements, it is clear that a multi-sectoral approach may be required to reduce the incidence and economic costs of TB.

In the Philippines, public-private partnership in TB control has a long history and somewhat enjoyed renaissance in recent years. In 1910, a private organization, the Philippine Islands Anti-Tuberculosis Society, now the Philippine Tuberculosis Society, Inc. (PTSI), was established and pioneered TB treatment in the country. Since then, the PTSI has supported various public agencies created to combat TB – from the TB Commission created in 1932 to the now Department of Health under its NTCP. Cognizant of the critical role of the PTSI, the government in return has funded the Society's operations with earnings of the Philippine Charity Sweepstakes Office. This partnership reached several milestones through the years. In 1973, the PTSI launched its own domiciliary care programs which helped reduce the patient load of Quezon Institute, the then dedicated public hospital for TB patients. In 1987, the PTSI adopted an expanded community-oriented TB control program and established several microscopy centers in many provinces. The PTSI was also instrumental in the founding in 1994 of the Philippine Coalition Against Tuberculosis (PhilCAT), an alliance of private medical organizations, individual health professionals and government agencies dedicated to combat TB. Recently, the PhilCAT was also involved in the training and certification of private clinics

that participated in the DOTS program of the Philippine Health Insurance Corporation (PHIC). According to PHIC reports, the DOTS-accredited private clinics have risen from 14 to 220 over two years since June 2004.

In this paper, we review the case for public-private partnership in TB control in the country, show how TB policies have promoted such partnerships, and suggest future policy directions to strengthen emerging modes of public-private partnerships. In section II, we present evidence that suggests that DOTS is not yet widely adopted in private hospitals and clinics. Since DOTS is not applied in these private health facilities, the treatment cost to the patient may be greater and the risk of default higher than in DOTS clinics. More seriously from a public health perspective, an

A significant number of patients who are either confirmed or suspected of TB affliction go to private physicians for consultation and treatment.

incomplete cure may endanger multi-drug resistant TB which is even more expensive to treat. In section III, we sketch an economic framework for analyzing the private physician's decision to practice DOTS. We focus here on physicians in private practice only because they largely determine the treatment protocols in private health care markets. But this should not be construed that other private health professionals like nurses and pharmacists or even the doctors in non-profit, voluntary

organizations are unimportant in attaining patient well-being. Using this framework, we assess how previous TB policies and the more recent initiatives have effectively influenced the private physician's decisions to adopt DOTS. We suggest some future policy directions in the concluding section.

TB services in the private sector

Two facts serve to justify a stronger public-private partnership in TB control in the country. First, a significant number of patients who are either confirmed or suspected of TB affliction go to private physicians for consultation and treatment. This despite the fact that in late 1990s many public health facilities were already

administering DOTS services. Second, only a few private physicians employ DOTS, despite their awareness and knowledge of this gold standard of TB treatment and that the requisite training to acquire DOTS expertise can be accomplished within three days. Partly to secure the health and welfare of the patient, but largely to protect the public welfare from risks of epidemic, the government should pay closer attention to an otherwise purely private transaction between health service users and providers.

TB treatment-seeking behavior

Most TB symptomatics or patients suspected of TB affliction often visit, if at all, health facilities or health providers other than public hospitals, clinics or doctors when seeking treatment. According to the 1997 National Tuberculosis Prevalence Survey, the latest available source, almost half of sample respondents who reported symptoms characteristic of TB took no action (Table 1). Moreover, almost half of those who sought treatment resorted simply to self-medication. Of those who sought professional help, more consulted private doctors (9.7%) than public health centers (6.5%).

These findings are corroborated in Auer *et al.* [2000] which reported that in a sample of 319 TB patients in 22 government hospitals in Malabon, Metro Manila, about 53 percent of them first approached private doctors and 29 percent initially visited government health centers for help. While both the 1997 NTPS and the samples in Auer, *et al.* were collected early on in the implementation of TB-DOTS in the public sector, it is still suspected that similar TB treatment seeking behavior persists. According to Kraft, *et al.* [2005], in a 2004-05 survey private physicians in 22 cities nationwide, those who treat TB patients see about one TB patient every day and about one in ten of their patients have TB. Among the reasons cited for why private providers remain popular despite the availability of DOTS services in public health centers is that patients tend to get better attention from private doctors and other clinic staff and that the social stigma of TB affliction is minimized in private clinics [Auer, *et al.* 2000; Solon, *et al.* 2001; PhilTIPS 2005].

Treatment-seeking Behavior of TB Symptomatics

Action taken (n=1,805)	Percent
None	49.1
Self-Medication	24.3
Family Member	2.5
Go to a traditional healer	2.7
Go to a public health center	6.5
Go to a private doctor (MD)	9.6
Go to a hospital	5.3
Total	100.0

Source: Capuno, *et al*/2003. Source of raw data: NTPS 1997.

Provision of TB services

Were not for the fact that the quality of TB services in the private health care market is other than DOTS, which is the gold standard of treatment for this communicable disease, the government has less reason to intervene in this particular market. This fact has been established in several studies. In particular, we analyze here the results of a PhilCAT survey conducted in 2002 to investigate the TB treatment practices of private physicians in Metro Manila and Cavite.² This survey

The graver policy concern over private physicians is not about their insufficient knowledge of DOTS, but perhaps their lack of incentive to adopt it.

was until 2005 one of only two available datasets that contain information on DOTS awareness and TB case management.³ The PhilCAT survey has a limited sample size of 188 to be representative of the general pattern of TB practice among private physicians in the two areas, much less in the whole country. The results are nonetheless revealing.

Of the 186 respondents who reported purely private or mixed public-private practice, only 109 volunteered information concerning their average patient load. Of these

109 physicians, an overwhelming majority had purely private practice and who see on the average about 35 patients daily in each of their clinics (Table 2). Each also sees about eight TB patients per week and encounters nearly four new TB cases a month. Those who also work part-time in public health facilities, perhaps as consultants or medical specialists, also have significant number of TB patients. These figures further support the findings from the 1997 NTPS that many TB patients go to private providers for help. Whether or not these patients are cured of TB depends partly on the case finding (diagnosis) and case holding (treatment) practices of the private physicians.

Average Patient Load

Practice Setting	No of MD's	Per clinic per day	TB patients per week	New TB cases per month
Mixed Practice	9	14.7	5.6	2.6
Pure Private	100	35.0	7.8	3.7
Total	109	33.4	7.6	3.6

Source: Capuno, *et al* (2003). Source of raw data: 2002 PhilCAT Survey of Private MDs.

The PhilCAT survey reveals that while most private physicians are familiar with DOTS, they do not practice it. Nearly three out of every four private physicians (73 percent) said claimed awareness of DOTS (Table 3). When probed, however, smaller proportions knew of the five key elements of the DOTS strategy.⁴ In particular, 52.4 percent was aware of the need to diagnosis through AFB smear test; 58.7 percent knew that an uninterrupted supply of TB drugs is essential; 42.3 percent knew that a recording and reporting system is critical to monitor overall progress; 63.5 percent knew that each patient must have a treatment partner; and 25.4 percent knew that government's commitment to TB control is also important. Arguably, only a few of the private physicians have a deeper appreciation of DOTS.

The graver policy concern over private physicians is not about their insufficient knowledge of DOTS, but perhaps their lack of incentive to adopt it. This is further suggested by the additional results of the PhilCAT survey reported in Table 3. In

Table 3. Awareness of and Adherence to TB-DOTS Practices of Private Physicians

TB-DOTS Practice Profile	Practice Setting*					
	Mixed Practice		Pure Private		Total	
	Percent	Total Number	Percent	Total Number	Percent	Total Number
Awareness of DOTS	76.0	25	72.5	160	73.0	185
Awareness of DOTS Elements						63
Diagnosis through AFB Smear Test					52.4	
Availability of TB Drugs					58.7	
Recording and Reporting System					42.3	
Requires a Treatment Partner					63.5	
Political Commitment					25.4	
Choice of Initial Diagnostic Procedure		25		161		186
Used AFB Smear Test	72.0		56.6		58.7	
Only	24.0		2.5		5.4	
With X-Ray	28.0		28.0		28.0	
With X-Ray and PPD	20.0		26.1		25.3	
Did not use AFB Smear	28.0		43.5		41.4	
Compliance with NTCP-Prescribed TB Drug Regimen						
Category I (New Smear +)	27.7	11	21.6	51	22.7	62
Category II (Treatment Failure)	0.0	8	0.0	42	0.0	50
Category III (New Smear -)	72.7	11	64.7	51	66.1	62
Recording and Monitoring Systems		25		161		186
Maintain clinical records of TB patients	90.9		95.4		95.0	
Monitor drug intake of their TB patients	92.0		94.3		94.0	

*The percentage computed here is based on the total number of valid responses. The latter is reported here under the column "Total Number" and may vary across survey questions and do not always add up to the total number of sample physicians. Source of data: 2002 PhilCAT Survey of Private MDs.

particular, as many as two in every five private physicians (41.4%) do not use AFB smear test at all as the initial diagnostic procedure as prescribed in the NTCP; of those who do, most administer it with X-ray or PPD (53.3%). Also, the general pattern of drug regimen prescribed in the private sector also varies from the prescribed NTCP regimen, called the Short-Course Chemotherapy (SCC). Only 22.7 percent followed SCC for new smear-positive cases (Category I), and none of the respondents prescribed SCC for patients who defaulted or failed treatment (Category II).

On a positive note, more than 90 percent of private physicians claim to monitor the drug intake or keep records of their patients. When probed, however, a majority of the private physicians said that their monitoring of drug intake is limited to a direct inquiry of their patient's drug intake and not necessarily whether the patient has taken the drug with the prescribed presence of a treatment partner. Thus, the reported high rate of record-keeping and monitoring in the private sector may not exactly be in line with DOTS.

A more recent survey conducted in 2004-05 in 22 cities nationwide confirms that most private physicians have insufficient knowledge of DOTS (Kraft, *et al.* 2005). Based on vignette scores that are used to measure clinical practice guidelines, private physicians with TB patients obtained an average score of 81 percent, but only 60 percent of them reached the cutoff mark. Further, about 45 percent are still found to use x-rays exclusively as primary diagnostic tool; only about one-fourth of them prescribed SCC; and most monitor drug only indirectly. These results are more alarming in that the 1,535 samples are more representative and include both general practitioners and specialists (in pulmonology, family medicine, infectious diseases, internal medicine).

The private market for TB services is thriving. But since the TB service sought and provided for in this market is not DOTS, the risks to the society of possible contagion due to treatment failure or the development of multi-drug resistant TB. Thus, government action is warranted. The first step is to assess the likely effects TB policies and programs on private physician's knowledge and practice of DOTS

Motivating the private physician

Indisputably, the private physicians – whom many TB patients seek first for treatment – are already the government's *de facto*, if silent, partner in TB control. Arguably, their role in TB control is equally important as that of the government because their sheer number.⁵ Motivating them to adopt DOTS is thus the greater policy challenge. This can be pursued by creating an inclusive policy environment and by providing sufficient professional and financial incentives.

Traditional TB policies have not assigned any significant role to the private sector. In fact, the public provision of TB services is justified because private health

Indisputably, the private physicians – whom many TB patients seek first for treatment – are already the government's *de facto*, if silent, partner in TB control.

markets alone cannot be expected to meet social equity and efficiency objectives. Access to private clinics and health facilities is limited to the poor who constitute the majority of those with TB. Since TB is a communicable disease, those untreated in the private health care markets also pose a health risk to the public. Conversely, if they are cured, then they share the full benefits of treatment with the public while they alone bear the full cost. Because of this *externality* effect, some will free-ride on the decision of others; thus, fewer than optimal

number of TB persons will seek treatment and, consequently, the likelihood of contagion is not minimized. To correct this market failure, the government – as the agent of the society – is tasked to provide the optimal level of TB services.

Contrary to common practice, however, public provision of TB services does not necessarily mean public production. The government can still fulfill its health goal (of providing the optimal level of TB services) through financing and procurement of privately produced TB services. A limited government role may be warranted because a public production and service delivery system, which entails maintaining and operating a health bureaucracy, is not always better at reaching and

serving certain population groups than the private clinics and hospitals. The private sector may have comparative advantage in terms of quality of service, location or cost-effectiveness.

In the Philippines, the private physician's edge over their government counterparts is not in terms of clinical competence to treat TB. Percentage wise, there are more government doctors than private practitioners trained in DOTS. Still, private doctors continually attract many TB patients. A corrective measure of course is to educate the public to demand DOTS services from their doctor of choice. Presumably, however, these patients are willing to pay higher service fees perhaps because of the private doctor's superior interpersonal skills, better location and the "anonymity" that private clinics affords to TB patients wary of social stigma. These suggest that the clinical aspect of treatment alone is unlikely to steer TB patients to public health facilities; other aspects of treatment, including doctor-patient interactions, also influence health seeking behavior.

These patients are willing to pay higher service fees perhaps because of the private doctor's superior interpersonal skills, better location and the "anonymity" that private clinics afford to TB patients wary of social stigma.

An information and education campaign that teaches the public first to demand *what* and only then suggests to go *where* for treatment, is an example of a policy that creates an enabling, inclusive environment. To help create such an environment, information and advocacy activities targeted to professional societies to promote DOTS or to medical schools to include DOTS in their curricula must also be undertaken. The same environment is likewise achieved when government regulation or self-regulation imposed by professional medical societies on its members is fair and effective. The adoption of DOTS should be made voluntary, especially during the period where the efficacy of this treatment protocol is not yet universally accepted in the medical profession. When DOTS is imposed, all should be subject to this regulation, the procedures for redress should be clear and applicable penalties meted out to ensure

compliance. However, a regulatory agency will often lack the necessary information to verify the exact quality of TB services provided. In this situation, incentives will be necessary to ensure compliance with the regulatory standards.

Physicians, in general, respond to both financial and non-financial incentives. Budgetary support, subsidies, tax breaks and concessions are some of the specific policy instruments that can improve the physician's monetary gains. Health insurance policies and other similar programs will also help improve the viability of DOTS services in the private sector. In fact, physicians who provide DOTS services to their TB patients can charge higher fees than other doctors with otherwise similar characteristics [Quimbo 2005].

Yet, according to participants in the focus group discussions we had with many private practitioners, the financial returns are important but not sufficient. To them the psychic pay-offs of saving lives and limbs or from peer approval or social recognition, and other non-material gains are also important. For these doctors, moral suasion and public honors are the more appropriate policy instruments. Thus, a combination of monetary and non-monetary incentives in an inclusive environment may be necessary to encourage private doctors to adopt DOTS. With these insights to physician practices, TB policies need to be assessed with the objective of harnessing the private sector to combat a persistent public health menace.

Review of TB policies

That only a few private physicians practice DOTS, can be taken as an unintended consequence of government policies that only recently have begin to fully appreciate and articulate the important role of the private physicians in TB control. Despite the auspicious starting role of the private sector in TB control in the country, it has been relegated a minor supporting role since then. The government sector continuously assumed the dominant role as various TB policies and other related were promulgated since the 1970s. A significant policy shift occurred in 2003 with the issuance of the Comprehensive and Unified TB Control Policy, the implementation of DOTS-Outpatient benefit package of the Philippine Health

Insurance Corporation, and the more recent zonal approach to TB control piloted in Quezon City. These recent policies are distinct from previous ones policies in that the private sector is now viewed as a service delivery partner rather than a mere social partner in TB control.

We propose to classify further the relevant policies into those that directly and primarily affect the health service providers (supply-side interventions, see Appendix 1) and the health service users (demand-side interventions, see Appendix 2). This market-based classification is deemed useful because the health care market is the relevant setting for most physicians engaged in private practice.⁶ It should be noted however, that some of these policies simultaneously affect supply and demand side of the market for TB services

Private physicians as social partners

The supply-side policies promulgated before 2003 principally concerned the availability and quality of TB services in the public sector. Even in 1996 when the DOH adopted DOTS, the new treatment guideline was only drawn up for and implemented in the public sector. To be sure, these policies recognize private doctors as *social* partners, in that like all other members of the society, they are enjoined to combat the spread of TB in the country. At best, the various professional medical societies were tapped as institutional partners to disseminate information and advocate support among its members for the various government TB programs and projects. As incentive mechanisms, these policies are weak. That is, while these policies do not forbid DOTS in the private sector, they also do not make its adoption especially rewarding.

By promoting DOTS in the public sector, the major supply-side policies may have also inadvertently drawn away prospective customers from the private sectors. A look at the design and implementation features of the major supply-side policies is revealing:

The National TB Control Program (NTCP) is primarily directed at the public health system. Information and education campaigns concerning DOTS and other incentive schemes are directed at government doctors

and facilities. Publicly procured TB drugs are distributed at government health centers. Also, it does not include, much less specify a function for, the private sector in the list of health workers tasked to carry out the NTCP.

- The TB programs adopted by other national government agencies only apply to their own employees and dependents, such as those of the Department of Education and Department of National Defense. Further, the DOTS service providers in these agencies are also government workers.
- The DILG's Memorandum Circular No. 98-155 is rather weak. It only provides the legal setting whereby public-private partnerships in local TB control may be undertaken. Moreover, it does not specify how such partnerships may be formed, mobilized and sustained. It also appears that the implementation of this policy is not monitored.
- Applicable NEDA policy directly concerns only private voluntary activities in TB control, thus excluding the majority of private physicians.
- Current occupational health and safety standards are relevant to the detection and treatment of TB among the employed. However, existing guidelines do not specifically prescribed the application of DOTS. Thus, the private corporations are allowed to choose their own mode of TB treatment.

Since government's DOTS program was only implemented in the public sector, various regulatory policies that affect the entire health sectors were silent as well on how DOTS will be promoted or monitored in the private sector.

Since government's DOTS program was only implemented in the public sector, various regulatory policies that affect the entire health sectors were silent as well on how DOTS will be promoted or monitored in the private sector. To be sure, however, these policies helped secure a minimum overall quality of health services provided in the private sector, and for the protection of the patient. But these regulatory policies did not particularly promote the adoption of DOTS, in fact some may have adverse effect on private practice, as is evident in a short policy review below:⁷

- Essential drugs list (RA 6675; E.O. 49, s. 1993; BFAD Circular #O1, s.1997). These policies identify, among others, the essential TB drugs that must be prioritized in government procurement, and the requirement for bioavailability tests for such drugs.
- Policies hospital establishment and operation (RA 5921; DOH AO# 70-A, s. 2002). These specify the human and other resource requirements for operating a hospitals and, therefore, laboratory facilities in the country.
- Policies to lower the price of selected drugs through parallel importation (DOH AO N#85, s. 2000; DOH AO # 69, s. 2001; DOH DO #367-H, s. 2001; DOH AO#70, s.2002). These administrative orders set the guidelines for the Pharma 50 Project of the DOH, in line with the promises of President Gloria Macapagal Arroyo in her 2001 SONA. Since the privilege to participate in the parallel drug importation is limited to government agencies, this policy may crowd out private drug companies and distributors. This may also lead to a more aggressive marketing of branded drugs among private physicians.
- Policies on government procurement of goods and services (RA 9184). This policy unifies and updates all government procurement procedures. With the new procedures, it is expected that bidding competition among private suppliers will become more transparent and fairer, leading to lower prices and improved quality of drugs, medicines, health equipments and services.

Private physicians as service delivery partners

More recent policies recognize and exploit the potential of the private doctors as *service delivery* partners; that is, the government procures or subsidizes privately produced DOTS services and delivered to target beneficiaries. Under this new arrangement, the government can still fulfill its public health mandate (of providing TB services to all, especially to the poor) without crowding out the private sector. Emerging modes of public-private partnerships are piloted. To enhance the efficiency of the emerging partnership, however, the weaknesses in the policy design and implementation that now begin to surface out must be resolved.

The beginning of the policy shift was evident as early as 2000 in the DOH's Health Sector Reform Agenda (HSRA).⁸ In the HSRA's implementing guidelines (DOH A.O. # 37, series 2001), the government set among the national health objectives the increased DOTS coverage to 100 percent of the population and the increased compliance among private doctors with the National Consensus on TB Diagnosis and Treatment. In line with the promotion of DOTS in the private sector, the DOH in 2002 has formally agreed with United Laboratories, Inc. (Unilab), a private corporation, to supply the latter with TB drugs for the patients in their DOTS clinics.

Another notable policy development was the issuance in 2003 of Executive Order No. 187. This EO mandates the collaboration between the national government agencies on the one hand, and private sector organizations, on the other, in the conduct of information and education campaign for the Comprehensive and Unified Policy for Tuberculosis Control in the Philippines (CUPTCP). Those in the private health sector enjoined in the campaign are the PhilCAT, Philippine Medical Association, and the Association of Health Maintenance Organizations of the Philippines. Further, the PhilCAT is deputized under the CUPTCP to carry out monitoring and accreditations functions. EO No. 187 and DOH's A.O #37, series 2001 have been disseminated to the professional medical societies and other medical groups. However, translating these policy pronouncements into concrete operational guidelines for public-private partnerships still have to be done.

Unlike supply-side policies, demand-side policies can create powerful financial incentives to private doctors to adopt DOTS. There are two major demand-side policies, namely: (i) the social health insurance packages of the Philippine Health Insurance Corporation (PhilHealth), and (ii) the disability payment policies of the Government Service Insurance System, Social Security System and the Employees Compensation Commission. While PhilHealth, SSS, GSIS and ECC provide medical benefits not confined to TB treatment to their sick members, together in 2001 they have paid reportedly close to Php100 million for their members with TB. Presumably, a portion of this amount was spent on privately-provided TB services.

An emerging mode of public-private partnership in TB control in the country resulted from the PhilHealth's introduction in 2003 of its TB-DOTS Outpatient Benefit Package. To provide the necessary and complete treatment for its members with TB, the PhilHealth under this new benefit package extends to a member or a member's dependent a fixed insurance benefit of Php4000 for outpatient treatment in an accredited private DOTS clinic or provider. The beneficiary chooses an accredited provider that PhilHealth will pay directly subject to PhilHealth guidelines and compliance with the TB treatment protocol (i.e., DOTS) as specified in the NTCP.

The new benefit program of PhilHealth has appealing features to private physicians. First, the potential number of PhilHealth beneficiaries, which include the poor under its Sponsored Program, represents a huge potential demand for privately-provided TB-DOTS services. In addition to the guaranteed caseload, an accredited private physician is allowed to link up with accredited laboratory clinics and other providers for referral purposes. Because of this provision, more private providers may participate in the program than otherwise. The Philippine TIPS Project has supported ten of the so-called public-private mix DOTS clinics, which have all gained PhilHealth accreditation.

The Php4,000 payment to the physician or clinic, however, may be too small if TB drugs are included in it, especially in urban areas. It could also too big, especially in rural areas, if the TB drugs are secured free from public health centers. The emerging arrangement is that publicly procured TB drugs are provided free to these private TB patients who avail of the PhilHealth benefit package. Thus far, the available drug supply is enough to meet the increase in demand. However, as the program matures, better ways of supply chain management is needed to track and monitor drugs flow from public sources to private patients and to forecast of incremental drug requirements as more and more TB patients are treated in the private sector. To make TB drug prices also more affordable, the parallel drug importation policy may have to be amended to enable local drug distributors to participate, or a similar procurement facility may have to be established for the private sector.

In addition to the PPM DOTS clinics, the PhilTIPS project has introduced the zonal approach to TB control. This approach seeks to involve all providers in TB-endemic areas so that a more comprehensive and concerted attack at TB can be realized in a given area. The pilot area for this novel localized approach to TB control is Quezon City. Another major initiative is the establishment of 40 PPM DOTS clinics supported by the Global Funds Against Tuberculosis and Malaria. According to DOH reports, the GFATM will support another 100 PPM DOTS clinics beginning in 2006.

Concluding remarks

Tuberculosis is proving to be a bigger public health menace than the public sector can handle. Thus, all sectors of society must be involved in TB control. In this, the physicians in private practice – who are the preferred health providers for many TB patients, despite the availability of free DOTS services in public health facilities – have a critical role to play, which the government has only recently begun to recognize. The emerging partnership between private physicians and public health sector must be strengthened to eradicate TB in the country.

The policy challenge is how to widen the scope and scale of public-private partnerships in TB control. Obviously, the strategies to meet this challenge will depend on the distribution and behavior of TB patients and doctors in both the public and private sectors. While the required information on private providers are recently made available [Kraft, *et al.* 2005], the profile of the TB population is quite dated (i.e., 1997 National TB Prevalence Survey). Thus, the DOH must proceed with its next round of TB prevalence survey, preferably with more questions regarding the socioeconomic characteristics of the respondents. The additional patient-level information are needed to refine demand-side TB policies.

Private physicians also respond to information and incentives schemes. However, the specific types and amount of information and incentives to provide will depend on the characteristics and circumstances of the target physician [Kraft, *et al.* 2005]. Thus, the public-private partnerships can be pursued by area or treatment component (e.g., diagnosis in private clinics, drug dispensing in public health

centers). Of course, the key here is that the provision of DOTS should be professionally and financially rewarding to the private physician. That is, policies should create a market for DOTS.

However, the paramount concern is that public-private partnerships in TB control should be socially beneficial to be pursued. That is, the net social benefits from public-private partnerships should not be less than the net social benefits obtained from purely public provision. Already, concern over this is raised with the design and implementation of PhilHealth's DOTS outpatient benefit package. One emerging adverse consequence of the new PhilHealth program is the fee-splitting between accredited private physicians and public doctors who refers TB patients to accredited clinics to get a "commission".

While this practice clearly encourages private sector participation, the simple transfer in treatment setting does increase the number

The net social benefits from public-private partnerships should not be less than the net social benefits obtained from purely public provision.

of TB treatments. It only raises the total social cost of TB control since the Php4,000 are spent unnecessarily when the same patient could have been treated already in the public sector. On the other hand, public referral to public facilities may be encouraged, especially in areas where private capacity for AFB smear test is weak, but the private sector should only get paid for the services it actually performed. In this case, part of the Php4,000 should be paid to the public health facility. These are among the issues that must be resolved to maximize the impact of the PhilHealth's program on TB control.

Appendix 1. List of Policies Concerning the Supply of TB Services

Policy (Implementing Agency)	Main Provisions/Features	Implications for private MDs' participation
Health Sector Reform Agenda (HSRA) (DOH), 2000-04; Fourmula One for Health (DOH), 2005	<ul style="list-style-type: none"> - A comprehensive strategy to reform the public health sector, including key public health programs like TB control - Sets investment targets for TB control; sets target percentage of private doctors complying with the National Consensus on TB diagnosis and treatment 	- For information
DOH Administrative Order No. 37, series 2001 (DOH)	<ul style="list-style-type: none"> - <i>Guidelines on the Operationalization of the Health Sector Reform Agenda Implementation Plan by all Bureaus, Programs, Offices, Centers for Health Development and Attached Agencies of the Department of Health</i> - Delineates the roles of the different divisions and attached agencies of the DOH in the implementation of the five strategic reform initiatives in the health sector 	- For information
National Tuberculosis Control Program (NTCP) (DOH)	<ul style="list-style-type: none"> - The NTCP is the government's main anti-TB policy. The NTP officially adopted the DOTS strategy in 1996 (with the issuance of A.O. No. 24). The NTCP Manual of Procedures specifies guidelines and instructions for case finding and case holding for all government health workers involved in TB Control. 	- For information
Executive Order No. 187, series of 2003 (Comprehensive and Unified Policy for Tuberculosis Control, CUPTC) (DOH, all NGAs, private sector orgs.)	<ul style="list-style-type: none"> - <i>Instituting a Comprehensive and Unified Policy for the Tuberculosis Control in the Philippines</i> - Mandates the collaboration among key national government agencies, health financing institutions, and private sector organizations: <ul style="list-style-type: none"> - To adopt DOTS as the basis of implementation of TB control in the country, and within each national government agency; and - To conduct the dissemination of, and the training on, the Comprehensive and Unified Policy for TB Control in the Philippines (CUPTC) 	<ul style="list-style-type: none"> - For information - Enjoins the participation of PhilCAT, PMA and AHMOPHI in the IEC and training related to CUPTC
TB Prevention and Control Program (TPCP) (DepEd- School Health and Nutrition Center)	<ul style="list-style-type: none"> - Program components consist of case finding, treatment, information education and communication, capability building, and monitoring and evaluation - Adopt DOTS protocol: use chest X-ray examinations and sputum microscopy in screening TB cases among all primary and secondary school teachers and non-teaching personnel; provide drugs to category I and category II TB patients; follow up and monitor treatment of TB positive cases. 	<ul style="list-style-type: none"> - For information - Occasional joint anti-TB activity with Cure TB foundation, PTSI and Glaxo Smithkline
Local Government Tuberculosis Control Strategy (DILG Memorandum Circular No. 98-155) (DILG)	<ul style="list-style-type: none"> - As specified in DILG Memorandum Circular No. 98-155 - Enjoins all LGUs to pass a resolution declaring TB Control as the No. 1 public health program for 1998-2004, to adopt DOTS, and to create an Anti-TB Task Force comprising public health personnel, representatives from local medical schools, civic organizations and private medical practitioners - Enjoins all LGUs to make every public health center or facility a DOTS unit, with the requisite trained manpower, microscopy services, anti-TB drugs, and reporting books to monitor progress of patients. - Identifies best local practices in TB Control 	<ul style="list-style-type: none"> - For information - Enjoins the participation of the private medical practitioners in local anti-TB programs
Support to the National TB Control Program (SNTCP) (NEDA)	<ul style="list-style-type: none"> - NEDA coordinates the formulation, evaluation and monitoring of socioeconomic policies and programs consistent with the national development objectives. Principally, the NEDA <ul style="list-style-type: none"> - Facilitates the inclusion of programs and projects in support of the NTP in the Medium-Term Public Investment Plan - Monitors the progress of implementation of ODA-Assisted TB control programs - Assists in the evaluation for tax deductions of private donations for TB control programs and projects 	<ul style="list-style-type: none"> - For information - Regulate private voluntary contributions to TB control programs and projects
Occupational Safety and Health Standards (OSHS) (DOLE)	<ul style="list-style-type: none"> - Promulgated under the <i>Labor Code of the Philippines</i> - Specifies the standards and procedures for the adoption of occupational safety and health services in all workplaces in the Philippines. Also, it mandates the company health programs for workers to include the provision of trained occupational safety and health personnel, the provision of first-aid kits and emergency medicines and facilities, periodic conduct of health examinations, immunization programs, and health education and counseling 	<ul style="list-style-type: none"> - For information - Possibly increase the demand for industrial physicians and for TB diagnostic/treatment services

A Case for Public Private Partnership in TB Control

Republic Act No. 6675 (Generics Drug Act of 1988) (DOH)	<ul style="list-style-type: none"> - <i>An Act to Promote, Require, and Ensure the Production of an Adequate Supply, Distribution, Use and Acceptance of Drugs and Medicines Identified by their Generic Names</i> - Mandates the use of generic names in all transactions related to purchasing, prescribing, dispensing, and administering of drugs and medicines in the public and private sectors. - Also specifies the applicable penalties for violations 	<ul style="list-style-type: none"> - For information - Regulate drug prescription/ dispensing
Republic Act No. 3720 (Food, Drugs and Cosmetic Act of 1963), (DOH)	<ul style="list-style-type: none"> - <i>An Act to Ensure the Safety and Purity of Foods, Drugs, and Cosmetics being made available to the Public by creating the Food and Drug Administration which shall administer and enforce the laws pertaining thereto</i> - Mandates the standardization and quality of food, drug and cosmetics, and the adoption of measures to insure pure and safe supply of food, drug and cosmetics in the country. - Establishes within the DOH the Food and Drug Administration, now the Bureau of Food and Drugs (BFAD) 	<ul style="list-style-type: none"> - For information - Regulate drug mfg
Republic Act No. 5921 (Pharmacy Law of 1969), (DOH)	<ul style="list-style-type: none"> - <i>An Act Regulating the Practice of Pharmacy and Settings Standards of Pharmaceutical Education in the Philippines and Other Purposes</i> - Mandates the standardization and regulation of pharmaceutical education, and the supervision, control and regulation of the practice of pharmacy in the Philippines 	<ul style="list-style-type: none"> - For information - Regulate drug mfg
R.A. No. 4226 (Hospital Act of 1965), (DOH)	<ul style="list-style-type: none"> - <i>An Act Requiring the Licensure of All Hospitals in the Philippines and Authorizing the Bureau of Medical Services to Serve as the Licensing Agency</i> - Establishes the regulatory policy for the construction and operation of hospital or clinic in the country 	<ul style="list-style-type: none"> - For information - Regulate practice setting
R.A. No. 9184 (Government Procurement Reform Act of 2002) (DBM)	<ul style="list-style-type: none"> - <i>An Act Providing for the Modernization, Standardization and Regulation of the Procurement Activities of the Government and Other Purposes</i> - Sets the guidelines for government's procurement activities, including procurement planning, bid solicitation, evaluation and award, implementation and termination of the bid contract, use of alternative methods of procurement, protest mechanisms, dispute resolutions and the imposition of civil liabilities and administrative sanctions. - Applies to the procurement of infrastructure project, goods and consulting services, regardless of source of funds (whether local or foreign), by all branches and instrumentalities of the government, its departments, offices and agencies, including GOCCs and LGUs. Supersedes/amends prior procurement policies (E.O. No. 40, s. 2001; E.O. No. 262, s. 2000) 	<ul style="list-style-type: none"> - For information - Regulate sale of goods and services to gov't
Executive Order No. 49, series 1993 (DOH)	<ul style="list-style-type: none"> - Directing the Mandatory Use of the Philippine National Drug Formulary Volume 1 as the Basis for Procurement of Drug Products by the Government - Lists down essential drugs of proven safety, efficacy and quality at affordable cost. Limits government procurement to listed drugs and the basis for reimbursement of claims for drugs by members of PhilHealth. Included as vital drugs are TB drugs (isoniazid, rifampicin, pyrazinamide, ethambutol and streptomycin) 	<ul style="list-style-type: none"> - For information
DOH Administrative Order No. 51, series 1988 (DOH)	<ul style="list-style-type: none"> - <i>Implementing Guidelines for Department of Health Compliance with R.A. No. 6675</i> - Sets the DOH's own implementing guidelines for the Generics Drug Act of 1988 	<ul style="list-style-type: none"> - For information
DOH Administrative Order No. 55, series 1988 (DOH)	<ul style="list-style-type: none"> - <i>Requirements for Labeling Materials of Pharmaceutical Products</i> - Sets the font type, size and color, and the positioning of generic name of a drug product as printed in the label 	<ul style="list-style-type: none"> - For information
DOH Administrative Order No. 62, series 1989 (DOH)	<ul style="list-style-type: none"> - <i>Rules and Regulations to Implement Prescribing Requirements under the Generics Drug Act of 1988</i> - Delineates the guidelines on the proper prescription of drugs pursuant to the Generics Drug Act of 1988 	<ul style="list-style-type: none"> - For information - Regulate drug prescription
DOH Administrative Order No. 63, series 1989 (DOH)	<ul style="list-style-type: none"> - <i>Rules and Regulations to Implement Dispensing Requirements under the Generics Drug Act of 1988</i> - Delineates the guidelines on proper dispensing of drugs pursuant to the Generics Drug Act of 1988 	<ul style="list-style-type: none"> - For information - Regulate drug dispensing
DOH Administrative Order No. 65, series 1992 (DOH-BFAD)	<ul style="list-style-type: none"> - <i>Guidelines on Advertisement and Promotions to Implement the Generics Act of 1988</i> - Specifies the rules and regulations pertaining to the advertisement and promotions of pharmaceutical products 	<ul style="list-style-type: none"> - For information
Bureau of Food and Drugs Circular No. 01, series 1997 (DOH-BFAD)	<ul style="list-style-type: none"> - <i>Enforcement of the Requirements for Bioavailability Studies for Registration of Products included in the List B' under the DOH Administrative Order No. 67, series 1989</i> - Requires the conduct of bioavailability of certain drugs, including two TB drugs, namely: pyrazinamide (tablet) and rifampicin (capsule/tablet/syrup) 	<ul style="list-style-type: none"> - For information

DOH Administrative Order No. 56, series 1989 (DOH-BFAD)	<ul style="list-style-type: none"> - <i>Revised Regulations for the Licensing of Drug Establishments and Outlets</i> - Specifies the requirements for obtaining license to operate any organization or companies involves in the manufacture, importation, repacking, distribution and/or sale of drugs or medicines 	- For information
DOH Administrative Order No. 85, series 2000 (DOH-OSR)	<ul style="list-style-type: none"> - <i>Registration Requirements for a Government Agency Importing a Pharmaceutical Product with a Registered Counterpart Brand in the Philippines</i> - Sets down the licensing rules and procedures for government agencies that want to import drugs that similar but cheaper than locally available branded products. 	- For information
DOH Administrative Order No. 69, series 2001 (DOH-BFAD)	<ul style="list-style-type: none"> - <i>Guidelines and Procedures in the Utilization of Funds for Drug Importation and Distribution for the Pharma 50 Project</i> - Specifies the guidelines and procedures in the use of funds for imported drugs to lower the price of selected by 50 percent. 	- For information
DOH Department Order No. 367-H, series 2001 (DOH-BFAD)	<ul style="list-style-type: none"> - <i>Creation of Pharma 50 Project Management Unit</i> - Creates a unit within the BFAD to administer and supervise the DOH's Pharma 50 Project (i.e., the project intended to lower the price of selected drugs by 50 percent through parallel drug importation). 	- For information
DOH Administrative Order No. 70, series 2002 (DOH-BFAD)	<ul style="list-style-type: none"> - <i>Licensing of Botika ng Barangay in various Local Government Units</i> - With the goal of ensuring wide access low priced, good quality medicine, this A.O. sets the guidelines for the licensing of barangay-level pharmacies run by local government units, non-government organizations or community organizations 	- For information
DOH Administrative Order No. 70-A, series 2002 (DOH-OHR-BHFS)	<ul style="list-style-type: none"> - <i>Revised Rules and Regulations Governing the Registration, Licensure and Operation of Hospitals and other Health Facilities in the Philippines</i> - Mandated under Hospital Licensure Act (R.A. 4226) - Specifies the procedures for securing and renewing license to operate hospitals or health facilities both in the public and private sectors. - Specifies the licensing requirements such as service capability, personnel, equipment and instrument, and physical plant for first-level, second- level and third-level referral hospitals and other health facilities 	- For information

Source of table: Capuno et al. [2003].

Appendix 2. List of Policies Concerning the Demand for TB Services

Policy (Implementing Agency)	Main Provisions/Features	Implications for private MDs participation
PhilHealth In-Patient Benefit Package (PHIC)	<ul style="list-style-type: none"> - Promulgated under the National Health Insurance Act of 1995 (R.A. 7875) - Aims to provide a basic health insurance coverage for all Filipinos, indigents or otherwise. - As of Dec. 2002, the basic insurance covers only in-patient care services 	<ul style="list-style-type: none"> - For information - May increase demand for TB DOTS services
PhilHealth TB Out- Patient Benefit Package (PHIC)	<ul style="list-style-type: none"> - This an expansion of the basic health insurance coverage provided by PhilHealth. It includes an out-patient benefit package to eligible members with TB. - To be implemented in May 2003 	<ul style="list-style-type: none"> - For information - May increase demand for TB DOTS services
Disability and Sickness- Income Benefits for Government Workers (GSIS)	<ul style="list-style-type: none"> - Promulgated under the GSIS Act of 1997 (RA 8291) - Provides for increased and expanded social security protection of all government workers. The social security benefits include: <ul style="list-style-type: none"> - Disability benefits (which are granted to a member due to the loss or reduction in earning capacity caused by a loss or impairment of the of the normal functions of the member's physical or mental faculties as a result of an injury or disease); and - Optional pre-need coverage (for hospitalization products). - The Act specifies the requirements and procedures for enrollment, payment of premiums, and eligibility for benefit claims 	<ul style="list-style-type: none"> - For information - May increase demand for TB DOTS services
Disability and Sickness- Income Benefits for Workers in the Private Sector (SSS)	<p>Promulgated under the SSS Act of 1997 (RA 8282)</p> <ul style="list-style-type: none"> - Provides for increased and expanded social security protection of workers in the private sector, including: <ul style="list-style-type: none"> - Disability benefits (which are granted to a member due to the loss or reduction in earning capacity caused by a loss or impairment of the of the normal functions of the member's physical or mental faculties as a result of an injury or disease); and - Optional pre-need coverage (for hospitalization products). - The Act specifies the requirements and procedures for enrollment, payment of premiums, and eligibility for benefit claims 	<ul style="list-style-type: none"> - For information - May increase demand for TB DOTS services
Employees' Compensation Program (SSS-ECC)	<ul style="list-style-type: none"> - Promulgated under P.D. No. 626, and amended later; administered by SSS - Provides a list of ailments which are deemed work-connected, such as pulmonary tuberculosis. - Specifies the procedures and requirements for claiming employee's compensation benefits by members with work-connected disabilities - The employees' compensation benefits are in addition to whatever the members may claim under the GSIS or SSS Disability Benefits schemes. 	<ul style="list-style-type: none"> - For information - May increase demand for TB DOTS services

Notes

- 1 Assistant Professor and Ph.D. candidate, respectively, University of the Philippines School of Economics. Originally based on UPSE Discussion Paper No. 0414 (2004), this paper has been revised to accommodate more recent policy and program developments in TB control. The authors acknowledge the support and the opportunity to work on TB policy issues given to us by the Philippine Tuberculosis Initiative for the Private Sector, the PHILCAT for the survey data, the DOH for various information, their previous co-authors on related papers and their research assistants for support, and an anonymous referee for comments and suggestions on an earlier draft. The authors are fully and solely responsible for the views expressed and whatever errors contained herein.
- 2 The PhilCAT survey was designed to elicit from private physicians information about their practices. Two physicians with pure public practice were inadvertently included in the sample. These two physicians however are excluded in the analysis in this paper.
- 3 The Medicos del Mundo survey (Portero and Rubio 2002) was other comparable survey dataset. However, we were unable to get hold of this dataset.
- 4 Developed in 1993 by the WHO and adopted by DOH since 1997, the DOTS has five elements, namely: (1) government commitment to sustained TB control activities, (2) case detection by sputum smear microscopy, (3) a standardized drug regimen, with directly observed treatment, depending on the patient's classification as either a new case or as a previously treated case, (4) a regular and uninterrupted supply of the requisite TB drugs, and (5) a standardized recording and reporting system.
- 5 There is no official tally of the total number of private MDs in the country. However, according to Kraft, *et al.* [2005], there were already 6,622 TB-treating private physicians in 22 major cities in the country in 2004-05. In comparison, there were only 3,021 government physicians (all types) in the country in 2002 according to the National Statistical Coordination Board.
- 6 This is not to say that the physicians in the voluntary or non-profit sector are not-important stakeholders in TB control. But since they constitute only a minority, they are less of a policy challenge than the more numerous physicians engaged in private practice.
- 7 Not only are the regulatory policies inadequate, they also seem to be weakly enforced. Lim and Pascual (2002) finds that BFAD lacks appropriate capacity to ascertain the quality of medicine through inspection, registration and licensing of drug manufacturers. Also, they conclude that "... only 16 of the 80 or so pharmaceutical manufacturers are 100% compliant with current good manufacturing processes. There are complaints that culprits responsible for counterfeit and substandard drugs are not properly prosecuted and punished."

- 8 With the appointment of Secretary Francisco Duque III, the Health Sector Reform Agenda was reformulated in 2005 as *Fourmula One (F1) for Health*. The latter however have basically the same emphasis as its predecessor.

References

Journal article:

- Auer, C., J. Sarol, jr., M. Tanner and M. Weiss. 2000. Health seeking and perceived causes of tuberculosis among patients in Manila, Philippines. *Tropical Medicine and International Health* 5(9): 648-656.
- Peabody, J. W., R. Shinkada, C. R. Tan, Jr. and J. Luck. 2005. The burden of disease, economic costs and clinical consequences of tuberculosis in the Philippines. *Health Policy and Planning* 20(6): pp 347-353.
- Quimbo, S. A. 2005. Enhancing the private provision of care through premiums for ability: The case of tuberculosis care in the Philippines. *Health Economics* (forthcoming).
- Yu, C. 1994. Health Policy Analysis: The Philippine National Tuberculosis Program. *Medical Journal of the De La Salle University* 10(2): 22-39.

Books:

- Department of Health. 1997. *1997 Philippine Health Statistics*. Manila.
- Department of Health. 1999. *National Objectives for Health. Philippines 1999-2004*. HSRA Monograph Series No. 1. Manila.
- Department of Health. 1999. *Health Sector Reform Agenda. Philippines 1999-2004*. HSRA Monograph Series No. 2. Manila.
- Department of Health. 2000. *Philippine National Drug Formulary and Essential Drug List*, volume I (5th ed.). Manila.
- Department of Health. 2001. *Manual of Procedures for the National Tuberculosis Control Program*. Manila.

- Harding, A. & A. S. Preker. 2003. *Private Participation in Health Services*. Washington, D.C.: The World Bank.
- Tan-Torres, T. & M. Bandolon. 1998. Tuberculosis in the Philippines: Areas for Health Policy and Systems Research. HSPR Monograph No. 8. Department of Health-Essential National Health Research. Manila.
- World Health Organization. 2002. *An Expanded DOTS Framework for Effective Tuberculosis Control*. Manila.
- Zweifel, P. & F. Breyer. 1997. *Health Economics*. New York: Oxford University Press.

Contributions to books:

- Harding, A. 2003. Introduction to Private Participation in Health Services. In A. Harding & A. S. Preker (eds.) *Private Participation in Health Services*, pp. 7-74. Washington, D.C.: The World Bank.
- Unpublished works:
- Allison, A. et al. 2002. Strategic Document for Private Sector Involvement in TB Control in the Philippines. TBCTA Mission. Manila.
- Kraft, A. D, C. A. Tan, Jr., S. A. Quimbo, J. J. Capuno, E. A. F. Yap, N. Juban and M. Cabaraban. 2005. Private Provider Study (Final Report). A survey report submitted to the Philippine TIPS Project. Pasig City.
- Lim, J. & C. Pascual. 2002. On Improving the Poor's Access to Affordable Drugs. A report submitted to the World Bank. Manila.
- Philippine Coalition Against TB. 2003. Comprehensive and Unified Policy for Tuberculosis Control in the Philippines. A paper presented at the Lung Center of the Philippines, Quezon City, on 26 February 2003.
- Philippine Health Insurance Corporation. 2003. Draft Document for the Proposed TB-OP Benefit Package. Pasig City.
- PhilTIPS. 2005. Proceedings of the PhilTIPS Roundtable Discussions on TB Policy, held on June 10, 2005 in Oakwood Premier Ayala Center Hotel, Makati City. PhilTIPS Office, Tektite Towers, Ortigas Centre, Mandaluyong City.

- Portero, J. L. & M. Rubio. 2002. Private Practitioners and Tuberculosis Control in the Philippines. Medicos del Mundo Spain Tuberculosis Project in the Philippines. Manila.
- Project Assistance to Control Tuberculosis. 2002. Foreign Partners' Support to Tuberculosis Control in the Philippines. Manila.
- Tan, C. R., Jr. and J. J. Capuno. 2004. The Economic Burden of TB and the Need for Private Sector Initiatives. UPSE Discussion Paper No. 2004-14. University of the Philippines School of Economics. Diliman, Quezon City.
- Romulo, R. L. C. 2003. Conquering Tuberculosis: The Picture, the Mirror & the Crystal Ball. A report submitted to the Philippine TIPS Project. Pasig City.
- Solon, O. et al. 2001. UHNP End-of-Project Evaluation. Report submitted to the Urban Health and Nutrition Project of the Department of Health. Manila.
- Yidan Wang, ed. 2000. Public-Private Partnerships in the Social Sector: Issues and Country Experiences in the Asia and Pacific. ADB Institute Policy Paper Series, March and October 2000. Tokyo, Japan.
- World Health Organization. 2002. Draft Report on the Joint Tuberculosis Programme Review: The Philippines. Manila.